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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,482	01/06/2004	Ki-soo Chang	Q77580	3529
23373	7590	08/14/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			AGBOTTAH, AWUDZI Z	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/751,482

Applicant(s)

CHANG, KI-SOO

Examiner

Awudzi Z. Agbottah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,6-10, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Olkkonen et al. (**United States Patent Application Publication No. US 2005/0088980 A1**).

3. Consider claim 1, Olkkonen et al. discloses an invention embodied in the Bluetooth Standard, that allows information provider devices and mobile devices to identify each other in an ad-hoc network (**Page 3, Paragraph 25, Lines 1-9**). Olkkonen et al. discloses a wireless device with a displayed menu that allows the user to select ad-hoc network (peripheral devices) (**Page 7, Paragraph 82, Lines 1-5; Figure 1**).

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Olkkonen et al. additionally discloses an ad-hoc network information providers (control unit) comprised of wireless devices (user interface) that provides information on devices that are connectable to a wireless device. The wireless device allows the user to select at least one other peripheral device (**Page 3, Paragraph 22, 26,27**) to connect to.

4. Consider claim 2, as applied to claim 1 above. Olkkonen et al. discloses that an information provider (control unit) can send or receive inquiries to specify the type of ad-hoc network (connectable peripheral devices) with characteristics of interest (**Page 3, Paragraph 25, Lines 19-28; Paragraph 26**). These characteristics of interest search for a particular device such as a printer or fax machine as Olkkonen et al. states.

5. Consider claim 3 as applied to claim 2 above. Olkkonen et al. discloses an FHS packet buffer in which device information is contained (**Figure 4B; Page 5, Paragraph 52**).

6. Consider claim 6, as applied to claim 1 above. Olkkonen et al. discloses an invention embodied in the Bluetooth Standard (**Page 3, Paragraph 25, Lines 1-4**) in which an information provider (control unit) sends an inquiry message to an ad-hoc network to search for devices it's wireless range (**Page 3, Paragraph 22-23**). The inquiry message is answered by a member of an ad-hoc network detecting the inquiry. The inquiry response includes information characterizing the ad hoc network which includes device information for the network. The peripheral devices exhibit ad hoc

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network capability and scatternet capability (**Page 3, Paragraph 26**). There is still a search for ad hoc network information for devices that are connectable (**Page 3, Paragraph 27**) and this information is displayed in a menu of the arriving device (**Page 7, Paragraph 82**).

7. Consider claim 7 as applied to claim 6 above. Olkkonen et al. discloses an invention embodied in the Bluetooth Standard (**Page 3, Paragraph 25, Lines 1-4**). The received service attributes one of support of ad hoc network service (**Page 3, Paragraph 23**) and scatternet ability (**Page 3, Paragraph 27, Lines 1-3**). The arriving device (control unit) gathers more information on peripheral devices (**Page 3, Paragraph 27**).

8. Consider claim 8. Olkkonen et al. discloses a wireless communication method of indicating devices connectable to ad hoc networks for Bluetooth communication (**Page 3, Paragraph 25**). Olkkonen et al. discloses a wireless device (input unit) that enables the user to input desired values (**Page 3, Paragraph 26, Lines 2-3**) and a display unit for displaying various information (**Figure 1, Page 4, Paragraph 32**).

Olkkonen et al. discloses a display unit for displaying information on peripheral devices in range of the connectable wireless communication device (**Page 3, Paragraph 26-27**).

Additionally Olkkonen et al. discloses that a user can connect to a selected device through an input unit in which the user connects to the device the user wants to connect to (**Page 6, Paragraph 82, 87, 94; Figure 1**).

9. Consider claim 9, as applied to claim 8 above. Olkkonen et al. discloses steps for providing information through the display unit comprising, sending an inquiry signal to a member of an ad hoc network (**Page 3, Paragraph 23**). Olkkonen et al. discloses another step of receiving an inquiry response comprising device information from at least one of the peripheral devices that received the inquiry (Page 3, Paragraph 23, Lines 1-7), and providing information on said at least one of the peripheral devices that has received the inquiry (**Page 3, Paragraph 23 and 27**).

10. Consider claim 10 as applied to claim 9 above. Olkkonen et al. discloses an FHS packet buffer in which device information is contained (**Figure 4B; Page 5, Paragraph 52**).

11. Consider claim 13, as applied to claim 8 above. Olkkonen et al. discloses a wireless communication method which provides information through a display unit (**Page 7, Paragraph 82**). The steps comprises sending an inquiry to search for peripheral devices in wireless range, and receiving a response that includes device information of at least one device (**Page 3 , Paragraph 23,24 and 26**).

Olkkonen et al. discloses determining if service of at least one device is collected from the received device information (**Page 3, Paragraph 25, Lines 19-28**) and at least one peripheral device has ad hoc (**Page 3, Paragraph 22**) and scatternet ability (**Page 3, Paragraph 27**), in which at least one peripheral device are connectable to

corresponding devices, and then the corresponding devices are displayed as information on at least one peripheral device (**Page 3, Paragraph 25-27**).

12. Consider claim 14, as applied to claim 13 above. Olkkonen et al. discloses a wireless method that supports ad hoc and scatternet capabilities (**Page 3, Lines 1-3**), and requests devices to discover more peripheral devices (**Page 3, Paragraph 26**).

13. Consider claim 15, Olkkonen et al. discloses a wireless communication method of identifying devices connectable to and ad hoc network for a Bluetooth-embedded wireless communication apparatus (**Page 3, Paragraph 25**). Olkkonen et al. also discloses an input unit for enabling user to input desired values and a display unit for displaying various information (**Page 7, Paragraphs 82 and 87; Figure 1**).

This method comprises steps of, providing through a display unit, information on peripheral devices in a range connectable to the wireless communication apparatus (**Page 6, Paragraphs 81 and 82**).

Additionally Olkkonen et al. discloses that a user can connect to a selected device through an input unit it which the user connects to the device the user wants to connect to (**Page 6, Paragraph 82, 87,94; Figure1**).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen et al (**United States Patent Application Publication No. US 2005/0088980 A1**) in view of Lang (**United States Patent Application Publication No. US 2006/0139320 A1**).

16. Consider claim 4 and 11, as applied to claims 1 and 8. Olkkonen et al. discloses the claimed invention, but fails to disclose a LCD display for displaying various information on peripheral devices in the form of a character string. However, Lang discloses a Bluetooth device (**Page 2, Paragraph 19, Lines 14-20**) with an LCD display (**Page 2, Paragraph 20, Lines 1-5**) to display various information in the form of a



character string (**Page 2, Paragraph 22, Lines 1-12; Figure 1**). In light of Lang, it would be obvious to one of ordinary skill in the art to combine the teachings of Olkkonen et al. and Lang for the purpose of having a high resolution display for the device which makes it easier to see the characters on the screen.

Claims 5 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen et al. (**United States Patent Application Publication No. US 2005/0088980 A1**) in view of Mazar et al. (**United States Patent Application Publication No. US 2006/0121846 A1**).

17. Consider claims 5 and 12, as applied to claims 1 and 8 above. Olkkonen et al. discloses the claimed invention, but fails to disclose a speaker producing sound that indicates the information on the peripheral devices. However Mazar et al. discloses a Bluetooth wireless communication apparatus (**Page 4, Paragraph 46, Lines 1-7**) that comprises an audio annunciation ability (speaker) that produces sound based on the information of peripheral devices (**Page 8, Paragraph 91, Lines 4-13; Page 9, Paragraph 97; Figures 5 and 6**). Please note that the communication medium labeled #612 can take the form of a wireless medium (**Page 9, Paragraph 93, Lines 7-11; Page 5, Paragraph 52**). In light of Mazar et al. it would be obvious to one of ordinary skill in the art to combine the teachings of Olkkonen et al. and Mazar et al. for the purpose of having an apparatus that's more convenient for the user because the user

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no longer has to look at the apparatus for the information he/she needs. The apparatus will tell the user. This makes the apparatus more appealing to users.

***Conclusion***

18. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents

P.O. Box 1450

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**Hand-delivered responses** should be brought to

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19. Any inquiry concerning this communication or earlier communications from the

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Examiner should be directed to Awudzi Z. Agbottah whose telephone number is (571) 270-1114. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.


If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Awudzi Agbottah

A.Z.A./aza

  
RAFAEL PEREZ-GUTIERREZ  
PRIMARY EXAMINER  
8/4/06

July 27, 2006